

Amendments to the Specification:

After the title, please insert the following subheading and paragraph:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is entitled to the benefit of and incorporates by reference essential subject matter disclosed in International Patent Application No. PCT/DK2004/000735 filed on October 26, 2004 and Danish Patent Application No. PA 2003 01577 filed October 27, 2003.

Please insert the following paragraphs [0004] – [0007] as follows:

[0004] DE 202 08 106 U1 discloses a cooling device, in particular for liquid cooling of semiconductor devices. The cooling device comprises a housing and a separate baffle positioned inside the housing and with a plurality of flow cells defined therein. The flow cells each form a fluid connection between an inlet manifold and an outlet manifold. DE 202 08 106 U1 does not disclose that the housing, the manifolds and the flow cells are formed in a single piece.

[0005] US 6,101,715 discloses a microcooling device with a channel structure through which a coolant fluid can flow. The device shown in Fig. 1 comprises an inlet manifold, an outlet manifold and a plurality of flow channels manufactured in a single piece.

[0006] The flow channels are connected in parallel between the manifolds along one direction, i.e. the direction transversal to the flow direction. However, they are not arranged in parallel along any other direction. As a consequence, a temperature gradient would inevitably occur along the flow direction of the flow channels, and it would not be possible to tailor the cooling.

[0007] EP 0 447 835 concerning a cold plate and an integrated cooling module embodying a cross-hatch flow distribution scheme discloses a prior art cooling module in Figure 3. This prior art cooling module comprises an inlet and an outlet, and a meandering flow channel establishing a fluid connection between the inlet and the outlet. The flow channel is provided with fins in order

to create turbulence in the cooling fluid. Since there is only one flow channel, the cooling is serial, and a temperature gradient will therefore occur.

Before paragraph [0006], please amend the following subheading:

BRIEF SUMMARY OF THE INVENTION

Please amend paragraph [0014] as follows:

[0014] According to the present invention the above and other objects are fulfilled by providing a distributor for distributing a flow of fluid over at least one surface to be cooled, the distributor comprising a housing being manufactured in a single piece and having formed therein an inlet manifold, an outlet manifold and a plurality of flow cells connected between the manifolds, ———each flow cell comprising a cell inlet in fluid communication with the inlet manifold, a cell outlet in fluid communication with the outlet manifold, and a flow channel for guiding a flow of fluid from the cell inlet along the surface(s) to the cell outlet, ———wherein an inner wall structure of the housing defines the inlet manifold, the outlet manifold and the plurality of flow cells.

Before paragraph [0051], please amend the following subheading:

DETAILED DESCRIPTION OF THE ~~DRAWINGS~~ INVENTION

Please amend paragraph [0058] as follows:

[0058] In the cooling unit ~~embodiment of the invention~~ shown in Figs. 1 to 4, it is intended that a substrate with semiconductors be placed on top of the cooled plate 3, in a way known to those skilled in the art. The cooled plate could however be the substrate itself, placed directly as a cover on the cooling unit. This is a consequence of the minimized heat gradient along the cooled plate, which makes the traditional heat spreading plate, shown in Fig. 1 as the cooled plate 3, superfluous in some applications.

Please insert the following new paragraph [0070]:

[0070] While the present invention has been illustrated and described with respect to a particular embodiment thereof, it should be appreciated by those of ordinary skill in the art that various modifications to this invention may be made without departing from the spirit and scope of the present invention.